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NOTES

RECORDS OF THE EASTERN RED BAT ON THE NORTHERN FRONT RANGE OF COLORADO -- Although common in deciduous forest throughout the Midwest and east-central states, the eastern red bat (*Lasiurus borealis*) is rare in Colorado (Armstrong et al. 1994, Fitzgerald et al. 1994). However, this species has the potential to extend its range because belts of eastern deciduous forest habitat have expanded across western prairies and reached the Front Range of Colorado over the last 100 years (Knopf 1986). The eastern red bat ranges from Canada southward across the United States to northeastern New Mexico with most records occurring east of the Continental Divide (Hall 1981, Shump and Shump 1982, Cryan 2003). The historical range of the eastern red bat in Colorado extends along the riparian forest habitat of the South Platte and Arkansas rivers of eastern Colorado as far west as Boulder and Pueblo counties, respectively. Previous records of this species in Colorado are either individual animals caught incidentally or those submitted by the public to the Colorado Division of Public Health and Environment that lacked accurate location information (Armstrong et al. 1994). Everette et al. (2001) tentatively identified the presence of red bats on the outskirts of Denver, Colorado as recently as 2 and 7 July 1997, based on four echolocation calls recorded with Anabat detectors. Despite extensive mist netting, no red bats were captured. No new records have been reported for this species in Colorado since that time.

An adult female eastern red bat was captured at the Archery Range Natural Area along the Cache La Poudre River on the outskirts of Fort Collins, Colorado (40°32'N, 104°59'W) at 0029 hr on 31 July 2003. The non-reproductive bat weighed 19.5 g and had a forearm length of 42.8 mm. Photographs, body measurements, and blood and tissue samples were taken from the animal before it was released. The tissue sample and photographs will be archived at the Denver Museum of Nature and Science. On the same night, a second eastern red bat escaped from a mist net placed across Spring Creek at Hill Pond Natural Area (40°33'N, 105°5'W) in Fort Collins before it could be handled and processed (Roger Pearce, Colorado State University, Fort Collins, Colorado, personal communication). The eastern red bat is presumed to be migratory (Cryan 2003). Cryan (2003) used museum records to show the seasonal expansion of this species onto the northern Great Plains during August, which corresponds to the late-July date of our capture. Additional studies also have suggested that the eastern red bat migrates in late July and early August (Constantine 1966, Valdez et al. 1999). The bats noted here might have been behaving similarly. My colleagues and I mist netted approximately 60 nights in and around Fort Collins between 2001 and 2003 with no other captures of the eastern

red bat. The capture of one animal and observation of a second in the same evening suggest that eastern red bats might have been migrating through the area.

The documentation of the eastern red bat in Fort Collins is the first record for this species along the Cache La Poudre River, and is the northernmost location for the species in the state of Colorado. The eastern red bat might become more common in these areas as mature riparian forest continues to develop along rivers, canals, and other water diversions on the Front Range and adjacent prairies of Colorado.

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